

### AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listing of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A manufacturing method of a bonded wafer, in which said bonded wafer is manufactured by bonding a wafer for active layer wafer with a supporting wafer, wherein

said active layer wafer and said supporting wafer, which are to be bonded together, have fitting surfaces, respectively, for fitting to each other, each of said fitting surfaces comprising a part of a spherical surface having the same curvature;

at least either one of said active layer wafer or said supporting wafer are covered with film layers of the same material on the top and the back surfaces thereof, and wherein the film materials of said active layer wafer and said supporting wafer are different from the film materials of said active layer wafer and said supporting wafer; and

the film thickness on the top surface side is differentiated from the film thickness on the back surface side of said active layer wafer and said supporting wafer, thereby generating a warp in said active layer wafer and said supporting wafer and bonding said fitting surfaces together.

2.-5. (Cancelled)

6. (Currently Amended) The manufacturing method of a bonded wafer according to claim 1, comprising ~~the steps of~~:

ion-implanting hydrogen gas or noble gas into said active layer wafer to form an ion-implanted layer in said active layer wafer;

subsequently bonding said active layer wafer with said supporting wafer to form said bonded wafer; and

heat treating said bonded wafer by holding it at a predetermined temperature to induce a cleavage and separation at the site of ion-implanted layer as an interface.

7.-13. (Cancelled)

14. (New) The manufacturing method of a bonded wafer according to claim 1, wherein said supporting wafer is provided as a silicon wafer comprising silicon oxide films on the top and the back surfaces thereof, and wherein one of the silicon oxide films, either on the top surface side or on the back surface side, is thinned down with hydrogen fluoride.

15. (New) The manufacturing method of a bonded wafer according to claim 14, comprising:

ion-implanting hydrogen gas or noble gas into said active layer wafer to form an ion-implanted layer in said active layer wafer;

subsequently bonding said active layer wafer with said supporting wafer to form said bonded wafer; and

heat treating said bonded wafer by holding it at a predetermined temperature to induce a cleavage and separation at the site of ion-implanted layer as an interface.